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ORIGINAL ARTICLES

CLINICAL NEUROPATHOLOGY AND ITS VALUE IN GENERAL PRACTICE.*

By FREDERIC J. FARNELL, M. D.,
Providence, R. I.

"* * * And toward such a full or complete life, a life of various, yet select sensation, the most direct and effective auxiliary must be, in a word, insight."

The truthfulness of such a quotation can be no more apparent than to one who deals with those problems involving the intricate mechanism of the nervous system, emotional tone and instinctive life. The study of these phases of the nervous life of the individual has become, within the last decade, a special scientific branch of that large subject psychopathology and yet it has only gradually been able to break its attachment from that dominating parent and start out for itself in life's great battle. This endeavor to be empirical is merely the result of a general transformation of scientific activities and an extension of interests and methods from the inorganic field into the realm of the living—living creatures,—and then from a general life to a more special form, such as neuro-psychiatric, neuro-biological, bio-chemical and so forth. And still all these special branches overlap, requiring one always to keep before one's attention the bio-chemistry of metabolism, social obstacles, infections and other exogenous factors.

Complete insight into any problem, especially that of a human being, can only be acquired by "going at it" from its very origin and following it through its various stages of evolution. Yet it is necessary in so doing not to confuse the evolution of theory with that of accumulated facts; that is, one must systematize one's ideas in this building process. Synthetic chemistry

and pharmacology indicate one phase of an industrial development which has borne a close relation to the progress of science. In psychiatry and psychology, as well as the various other specialties in medicine, analysis or analytical methods have grown with great rapidity within the last fifty years. But, there can be little doubt, that, here, too, in the sphere of medicine there will soon be offered to our profession a synthetic psychiatry, a synthetic psychology, a synthetic clinical medicine. It is the writer's belief that the modern movement towards dynamic psychology, dynamic physiology, dynamic pharmacology, or what might be termed in general, "dynamics will add a material interest not only to the specialist but also to the practitioner of general medicine. The cry today is "HOW",—"How did it happen", "How did it take place",—followed by the second query, "WHY", "Why did it happen", "Why did it take place?" That is, we are all interested in cause and effect.

It is not my desire to go into the history of developmental medicine nor to burden you with data, dates or names of many of our famous workers in psychology, physiology or clinical medicines. But it does appear to be my duty not to enter this very interesting subject of clinical neuro-physiology, or better, neuropathology, without a few words as to its development from the standpoint of psychology and physiology in medicine.

Up to the middle of the nineteenth century we have had given to us the wonderful works of Helmholtz, Fechner, Donders and others whose theories were applied in psychology, physiology and esthetics. In the seventies, however, a new spirit entered the scientific world, first as a physiology and later as a physiological psychology. It was through the influence of Wundt that psychological laboratories made their appearance in Europe. But coincident with his findings in Europe the Harvard and Johns Hopkins Universities developed similar types of laboratories

* Read before the Providence Medical Association, February 2, 1920, (with lantern slides).

in America. Abreast with these psychophysiological laboratories began the gradual and progressive development of experimental psychology (Thorndike), the biological interest in evolution (Hall), studies in heredity and individualism (Darwin and Galton), child psychology (Hall and Phister), anthropology (Geiger and Muller), pathological psychology (Moreau de Tours, Maudsley and Kraepelin), pathological retardation (Sequin and Binet), psychotherapy (Charcot and Janet), analytical psycho-pathology (Freud and Jung) and the more recent problems of industrial psychology, business psychology, legal and forensic psychology and the broadening in our colleges of a most valuable branch in that department, namely, educational psychology. At this point one might add that there should be instituted as a major subject in all colleges and preparatory schools not only educational psychology but also educational psychology plus sociological psychology.

Notwithstanding these many divisions there is an appreciative tendency for all to point towards one common goal and there to unite in the adoption of the genetic problem,—that problem, again, one of origin and development, whether it be an abnormal child, a deluded man, a pathological liar, a hydrops of a joint, a convulsive seizure, an infantilism, a character twist, or a personality failure.

However, in presenting this subject an attempt will be made to synthesize the human being and devote one's attention to the mechanism and interrelation of the various parts or theoretical groups and systems, prestructural, as it were, uniting them and emphasizing the deviations from the normal. The development will show briefly some few pathological-physiological facts and their dependence, both physiologically and pathologically upon the action of the nervous system with the resultant biochemical and metabolic disorders of both a qualitative and quantitative type. A comparison by way of symbolization will be drawn between this synthetic method and the "tumblers" in a safe door or lock. As you are all aware there are rollers and plates placed in various positions up and down and forward and backward which will respond only when working in harmony either with the combination of the safe or the

key of the door. One often hears the expression "a tumbler has slipped" or "the tumblers have been changed." These various systems might be symbolized as "tumblers" which when properly placed and fitted will "tumble" in harmony, and which when disturbed or out of place will cause the lack of response to normal individual or racial adjustment.

Let us begin with the muco-cutaneous system. If one could theoretically estimate the length and breadth of the entire skin area it would equal approximately three by five feet. To this one should add the length and breadth of the gastro-intestinal tract from the muco-cutaneous junction at the mouth to the muco-cutaneous junction at the anal opening and then one would have a fair conception of the entire skin and mucous membrane area which is open and free to the outside world. That is, man, in his visceral body, is a closed cavity (not so in woman, however). The histology of skin and mucous membrane may be theoretically divided into three parts, the glandular, the vascular and the neuro-muscular. In the skin are the sweat glands, the cutaneous vessels and the pilomotor and smooth muscle. Correspondingly in the gastro-intestinal tract are the secretory glands, the highly vascular membranes and the smooth muscle (unmixed) which begins at about the second third of the esophagus and extends to the internal sphincter of the rectum. Each part of this muco-cutaneous system is under neurogenic control either through the sympathetic, the autonomic or the motor-sensory system and governs, probably, its bio-chemical or metabolic processes.

In pathological disorders, however, it is the endocrinologist's belief that the bio-chemical and metabolic phenomena are the result of pathological functionings using the nervous system only as an intermediary. That is, the endocrinologist begins with one system, the ductless glands, and views everything pertaining to the patient's difficulty through those spectacles.

Such pathological conditions as occur in the skin are abnormal areal sweatings or dryness; areas of flushings, oedemas, "gooseflesh", variations in temperature; selective arterial spasms (angioneurotic oedema, erythromelalgia, intermittent claudication, etc.) May not the gastro-intestinal mucous membrane suffer in addition

to the conditions recognized as ptyalism, hyperacidity, ulcer, intestinal indigestion, also from abnormal secretory disorders, arterial spasms, variations in temperature or even localized oedemas?

The next system to be evolved is the cardiovascular with its great length of arteries and veins distributed everywhere throughout the body. Beginning with the heart, a special smooth muscle tissue, there are going away from it the blood vessels, large in their beginning and diminishing in size to the arteriole, containing throughout smooth muscle and in their supportive tissues the well-recognized vasomotor nerves. Physiology has given us the rate and rhythm, the blood pressure, the contractility of the blood vessels, etc. Pathological physiology has shown us that there may occur brachycardia or tachycardia, arrhythmia, high or low blood pressure, vasomotor paralyses, flutterings and muscular irregularities of the heart. These may be associated or manifested by fainting attacks, swoons, convulsive-like seizures, blanchings of the skin, disturbances in respiration, variations in the CO_2 coefficient. One might even go further and suggest that such disorders might be manifest in changes in the chemistry of the blood as shown in the combining power of CO_2 , in variations in the non-protein nitrogen content, the uric acid value or McLean's coefficient.

How close this vascular system is to the active principles of the muco-cutaneous system. One of the chief activities of the mucous membrane system is that of absorption which is effected, undoubtedly, through the circulation by the influence of the nervous system. It is a well known fact that absorption, especially in the stomach, is subject to certain variations which are almost entirely dependent upon the circulation and its relation to the nervous system. Liquids, for example, may in one instance be readily absorbed and yet again may be retained in the stomach for a considerable length of time when they may be rejected in nearly the same condition in which they were taken in. It is probable that the small arteries may become so contracted under the influence of the vasomotor nerves that their calibre may be even obliterated. It is probable that this is one of the theories offered for the production of gastric ulcer. For,

there are usually associated, in ulcer cases, other symptoms indicative of gastro-intestinal neuro-circulatory disorders.

The third system to be considered is the endocrine. Claude Bernard and Brown-Sequard were probably the first physiologists, who, in 1893, offered theories as to the mechanism of the internal secretory function of the ductless glands. To discuss this system would be hazardous and well without the limits of this paper. Only as it bears a relation to our synthetic problem will it be touched upon. The entire chain of glands might be divided into any number of combinations or working groups such as pituitary-thyroid-ovary; thyroid-pancreas-adrenal; and so on. Glay has stated: "* * * it follows that the tone of the muscles of the blood vessels in so far as it depends on an automatic stimulation, either direct or indirect, is maintained not only by nervous stimulation, variations in gases contained in the blood and by the products of the catabolic processes but also by a specific substance normally found in various glands, * * * Many have occupied themselves with determining these functional correlations of a chemical nature, connecting them with one another and at the same time differentiating them from the correlation of the nervous origin—it was also recognized that there are still others which form an intermediary class, the neuro-chemical correlations or functional manifestations provoked by the nervous system, this nervous action determining a chemical excitation which is carried to some other part of the nervous system."

Histologically these glands are highly vascularised tissues with an abundance of secretory surface, hence there may be at least two types of disorders, one where the lack of secretory activity is due to the perverted or disturbed vascularity, a qualitative disorder, and the other where the secretory activity is either abundant, diminished or lost, a quantitative disorder. The neurogenic supply of these glands is through the sympathetic nervous system in general but it is probable that the pancreas and the thyroid receive a double innervation. The nervous or posterior lobe of the hypophysis, the sympathetic ganglia and the paraganglia of Kahn as well as the nervous elements recognized in the adrenal bodies are also parts of the sympathetic nervous

system directly related to the ductless chain of glands. Specialized nervous tissue of undoubted sympathetic type has been found imbedded in the kidney as well as in the ovaries and testes.

The clinico-pathological pictures, it would naturally follow, will be different. In the quantitative disorders one would expect to find frank syndromes such as the well recognized giant or dwarf, the macro-genito-somatotic type, the cretin or the Basedow's individual, the case of infantilism, Addison's Disease, etc. These quantitative disorders may therefore be placed in the same group as any actually destroyed tissue or function, namely, as one of an organic inferiority, lack of development or a cessation in development at a time earlier than the remainder of the body tissue. But in those disorders in which the vascular supply indicates a qualitative one, the symptoms will be less marked in direct relation to the glands and bear only a secondary relation to those manifested by the general vascular disturbance affecting our other systems as well. One can now add to the muco-cutaneous system and the general vascular system one which the writer will recognize as an associative system, the endocrine.

The fourth system to be considered is the sympathetic nervous system. It is a ganglionic trunk of fibres extending along the vertebral column on each side of the body the ganglia of which are connected with most of the spinal nerves by communicating branches. The nerves of this trunk belong to what may be called the cerebro-spinal visceral system. This system is recognized as the regulatory mechanism of the viscera. All parts of the visceral nervous system which lie peripherally to these communicating branches between the sympathetic ganglionated trunk and the spinal root constitute the sympathetic nervous system proper. Therefore, this full system includes the aforesaid visceral and those ganglionated plexuses in the head, chest and abdomen.

Its function both through its sympathetic and autonomic fibres is to regulate all smooth muscle, whether it be in viscera, blood vessels, bronchial tubes, reproductive organs, skin, iris of the eyes, etc. One may now add a fourth "tumbler" to our synthetic product whose duty it appears is to control all contractile tissue, which is a domi-

nant factor in our associative system, the ductless glands, our general cardio-vascular system and our muco-cutaneous system.

Our next system is the most intricate, the cerebro-spinal. It, too, is an organ with an organic and a functional function. It is a specialized tissue, highly vascularized and within its confines are developed all those organic or intellectual phenomena which distinguish man from animal,—speech, writing, reading, reasoning through intelligence, education, etc. Disturbances of a quantitative type in certain parts of this cerebro-spinal system produce those gross disorders not uncommon to all of us. But there may be coincident disorders due to quantitative disturbances elsewhere, such as a defectiveness due to an abolished thyroid, to an over-active thyroid, to an aplasia of the testicles, to infantile ovaries, etc., but here again they are all manifest organic inferiorities.

In addition there may be manifest after minute examination and study, disorders in vascularity without a quantitative disturbance as is manifest in certain types of lapses of consciousness, seizures of an epileptoid nature or even disorders manifest through spasm of the cerebral blood vessels due to vasomotor difficulties. Here the condition again is a qualitative type and probably is one bearing a close relation to the neurogenic control of the blood vessels themselves.

The functional function of this system is the mind with its diversities in growth and development and its adjustment. The mental processes which are expressed through thought are probably "reactions to stimulations", which are what a man really does qualified by what he is. One must now add three co-ordinative-interlacing factors which undoubtedly are inter-related and play a strong part in the life of man; first his personality, second his emotion and third his environment. And thus heavily laden he is turned out into this world to become a part of a social unit and yet to live in it he must live harmoniously.

The personality of an individual is oftentimes an obstruction to his personal welfare. He may be too tense or too loose; he may be inverted in his character; he may be twisted

in his instinctive demands. His volitional life may be undeveloped. His ambitions may be too idealistic. His moral code may be side-tracked. His ethical life may be bloated, and so on.

The emotional life of these individuals may be similar to the actions of an auto attempting to run with the brakes tightened, a depressed or melancholy type. Or the brakes may not work at all as evinced by the manic type. Their steering gear may be out of order as is seen in the schizophrenics. Their affective tone may be merely weakened and as a result it does not respond or adjust itself to the ordinary problems of life.

The environment under which one is compelled to live may bring about worry which is merely a conflict between hope and fear. It may be that their problem is a religious one with conflicts which may prevent them from living at ease even in their own home. It may be a social maladjustment, a misfit in society. Or the problem may have a repressed or abnormal sexual basis. With all these problems, environmental, emotional, personality disorders, mental difficulties, there may be a corresponding reaction affecting the tonus system with variations in the endocrine output through disorders in the cardio-vascular response producing bio-chemical and metabolic disturbances.

Sherrington once said, "Environment drives the brain and the brain drives the body." Can it not be that this sympathetic nervous system, both through its sympathetic and autonomic fibres plays a most important part in the adjustment of man to himself and to life, that is, that this particular nervous system is the stimulator into action? That when all the other systems are working harmoniously this nervous system becomes a regulator, that it controls and directs functional conditions, that it has the power to influence conditions and that it is only when it is aroused by organic inferiorities, by disorders in mentality, by disturbances in emotion, by twists of the personality that the many, many varieties of cutaneous, gastro-intestinal, cardio-vascular and glandular syndromes develop.

We thus have our series of "tumblers" as manifest by the various systems here touched

upon placed together in a synthetic manner producing a probable individual. In producing this individual it has been the writer's desire to emphasize the neurogenic control of the cardio-vascular and glandular systems which will manifest itself in many types and varieties of disorder of a qualitative type as well as the frank manifestations of a quantitative type.

DISCUSSION OF DR. FARNELL'S PAPER.

DR. CHARLES A. McDONALD, Providence, R. I.—I am very glad to be here to-night to hear Dr. Farnell's paper, but I am not very glad to discuss it. As I said a moment ago, Dr. Farnell has given us a vast amount. His pictures alone are an entertainment in themselves, and I would like very much to hear Dr. Farnell discuss more of the case pictures, which he presented, and go more into detail about the cases of which he is enthusiastic. The dynamic conception of activities is most stimulating and really instructive. Some of us, who do not know so much about the subject as Dr. Farnell, find it extremely difficult to explain some of this process. Some people are more readily convinced than others, but in trying to explain some of this we get to a point where we want to quit. I think that Dr. Farnell deserves to be congratulated on his ability to work, investigate and apply. I believe that Dr. Farnell and his associates are going to show us something, and I believe that in looking at it from a dynamic point of view they are going to show us a lot. I think probably that some of us would like to have Dr. Farnell tell us more what he means about personality in relation to emotion and environment. There are many of us here tonight who are unable to understand the importance of the functions of the vegetative nervous system in relation to personality. From the dynamic conception types of personality do occur and in this process the endocrine system plays an important part. The paper in general stimulates attention to this line of thought. For this fact alone we ought to be thankful for the presentation.

DR. FREDERIC J. FARNELL, Providence, R. I.—I do not wish to start in to explain personality. I think I have said enough about personality in the few things mentioned. Of course, one who

has to deal with emotional people in the manner that some of us have to in hospitals for nervous diseases and perhaps mental diseases, find that emotion is one of the hardest problems to handle. The question has already been raised whether or not emotion is in our body, in contradistinction to being in the brain. I do not want Dr. McDonald to feel that I thought it was in the brain because I don't know where it is, but it is probably a higher center of some kind that has not yet been discovered. There has been recently, some work produced, in one of the universities where they sought for and discovered a higher center or a higher something where it was observed that certain individuals could do certain things whereas others could not.

By personality I mean the general make-up of the individual. Everybody has a way of sizing up an individual—that I look upon as personality, but then in addition to that I add the manner they should respond to certain demands. If I see that a man looks like a psychopathic individual or a psychotic, I go further into his moral life, his ethical life, his volitional life, and see if it coincides with what is generally recognized as a psychopathic. It is what he is really that you are searching for.

THE NEED OF MENTAL HYGIENE IN RHODE ISLAND.*

By ARTHUR H. RUGGLES, A. M., M. D.
Providence, R. I.

The object of mental hygiene, as conceived by the Rhode Island Society for Mental Hygiene, is to aid in the work for the conservation of mental health, to help in raising the standards of care for those suffering from, or in danger of developing, nervous or mental disorders, to stimulate public interest in this problem and to disseminate knowledge concerning the causes, prevention and treatment of such disorders. As is clearly recognized, the trend of all modern medicine is towards prevention, and never have we been more clearly impressed with the needs of prevention in the case of nervous and mental diseases than we are to-day, as a result of the experience gained in the World War. From that experience we received two

most important lessons and it behooves us immediately to heed these lessons and so do our bit in the correction and prevention of disorders of the nervous system in our community. We learned, first, that there are many individuals among us whose nervous systems are below par, and when I use the term "nervous system", I mean to include the brain, the most important part of the nervous organization, as well as all other structures connected with that most important controlling part of all our activities. Our Draft Boards sought to exclude those who were visibly unfit, but on account of the pressure for men and the necessarily hurried examinations, many individuals, some with defects of the nervous system that should have been obvious to the trained examiner, and others much more obscure, were allowed to enter the service, and the great majority of these promptly broke down and have furnished a considerable percentage of the cases now requiring treatment by our government. It has been estimated, by competent observers, that 38 percent. of all former soldiers, sailors and marines, now needing treatment from the government, are suffering from nervous or mental disorders. This serves to show us what an important part this special branch of medicine plays in the problem now facing our government as a result of the late war, and it should also impress upon us how great a problem is before us in the proper consideration of the neuropath and psychopath in our civil life.

The second lesson that we have learned is that such cases seen and treated early offer a vastly better chance of cure than if they are allowed to drift on for weeks and months without proper guidance and care. In peace times the physician does not ordinarily see cases of nervous and mental disorders until they have existed for weeks and often for months. As a result of this delay, many of these cases have become too deep-seated for cure when they seek medical advice. During the war, all this was reversed. Soldiers presenting any abnormality of thought or conduct were usually seen very promptly by the medical officer of the neuropsychiatric service and the percentage of cures in such cases was therefore vastly higher than under civil conditions. It was not unusual in the army to see cases showing frank mental

* Read before the Providence Medical Association, November 3, 1919.

symptoms a few hours after the onset of such symptoms, when medical officers, trained in the treatment of such illnesses, instituted prompt treatment, removed the patient from the trying condition under which he had broken down, placed him under a regulated regime, administered appropriate therapeutic measures and were rewarded by seeing many cases which, seen under the civil conditions of delay and vacillation run a prolonged and often chronic course, make a recovery in a few days or weeks. With these lessons at hand it seems that the course to be pursued by those interested in mental hygiene is obvious; we must work to see that those whose nervous systems are below par are so directed that they shall not be subject to unusual stress and strain, and the great variety of difficult adjustments, which beset us in these days of unrest. The public should be educated to the advantages of early treatment of all cases of neuroses or psychoses.

In the old days if a member of a family exhibited evidences of mental disorder, it was thought that the facts should be concealed in the family council until the home could no longer cope with the problem and that then and only then should the problem be shared with the medical profession and then only for the purpose of "putting the patient away".

In the lessons of modern experience we realize what an injustice was done to the sick man and why our percentage of cures in mental diseases was not higher as the result of this ignorant procedure.

When we look back upon the work done by the neuro-psychiatrist in the World War, we begin to realize what an important part this branch of medicine has begun to play in our modern life. For the first time in the history of the world a physician, trained in nervous and mental diseases, known as the division psychiatrist, was assigned to each division of the army of the United States. At first these medics, with the strange title, were looked upon with a great deal of suspicion, but it was not long before each one of them became a valuable link in the chain of efficiency of division organization. They were appealed to by the Judge Advocate in every case that came up for general courtmartial. The regimental surgeons sought their advice in questions re-

garding obscure disorders in the men under their charge. The boards having to do with promotion asked that the division psychiatrist should examine certain men coming up for promotion who had shown difficulties in adjustment and division headquarters asked advice concerning problems of inefficiency and maladjustment among officers and men coming under their attention. So it gradually became recognized that soldiers showing definite nervous disorders could receive the best advice and treatment from those trained in the care of such diseases. And so it was seen that many of the difficulties in the army were difficulties in adjustment, due largely to psychological problems and here again the knowledge concerning abnormal psychology often proved the panacea for officers' apparent inability to handle men, for men's discontent and infringement of military rule and as a force to counteract depression, seclusiveness, suspicion, and psychomotor over-activity. In the army thousands of unfits were taken from the places to which they were improperly suited and were placed where they could make adequate adjustments. The incipient cases of mental illness were removed from stress and strain and put under proper treatment and a general oversight was kept over the mental health of the personnel of the division and prompt treatment was instituted to correct and overcome maladjustments. If this could be done in the army in time of war, to how much greater degree could it be successfully carried out in the problems of peace-time life, where causes and conditions can be thoroughly investigated, where treatment can be instituted without limitations of resources to work with and where the co-operation of family, social organizations and all medical facilities can be secured?

In a state campaign for mental hygiene, one of our earliest efforts should be to make it easier for the sick person and his friends to obtain advice. Special clinics should be multiplied and made easily available for all persons at all times. Every general hospital should have in its out-patient department a clinic for nervous and mental diseases. Every nursing organization should have nurses either in its organization or easily available to undertake the management of such cases as may be in their locality.

We should do more follow-up work. Each patient who has suffered from a nervous breakdown should be seen at intervals by a trained worker and should have the help of someone with experience to assist him in the difficult adjustments which he is called upon to make in present day life. Many a family is pulled down to the level of a nervous member simply from lack of help from a physician or nurse in pulling the standards of the nervous individual up to those of the family rather than the reverse.

In the last ten years we have learned much about the disorders of internal secretions and although we still have a great deal to learn about this intricate problem, we know that there are many individuals in our community suffering with nervous disease in whom the whole difficulty is the result of an insufficient secretion of thyroid, a disordered functioning of the pituitary gland, or defective activity of one or more of the other glands of the endocrine system, conditions which might be corrected if advice and treatment were sought early in the illness.

We have learned that such common conditions as neurasthenia, epilepsy and migraine, are, in some cases, the result of disorders of the glands of internal secretion. And as our study and knowledge of these hitherto misunderstood and abused conditions increases, we will then in reality be fulfilling our duties towards the prevention of disease.

At the present time in our State there is no adequate provision for the care of epilepsy. A few of them can be taken care of at the almshouse, but here the accommodations and hospital facilities are far from adequate for coping with the problem as it exists in our State. And there is no medical problem today that is more distressing for the sufferer, for his family and the public, than is that of epilepsy.

Rhode Island has made an excellent start towards the solution of the problem of its feeble-minded, and yet how many of us realize that we have as yet only scratched the surface of this important problem. We need an expansion of our present institution for the care of the feeble-minded. There are, today, in this State, many cases of feeble-mindedness who have been examined and for whom institutional

care is most desirable, and yet our institutions' capacity is taxed to the utmost and these cases must wait, some of them a very long time, before they can be placed under proper care. We need appropriations sufficient to insure the most modern treatment of the mentally deficient already under state care, and to develop the work for the future.

The problem of illegitimacy is a very serious one with us and one which is in nowise decreasing, and will not, until we have a more adequate provision for the care of the feeble-minded mother. How can we hope to prevent the increase of feeble-mindedness and insanity until we effect the segregation of the feeble-minded mother?

Much excellent work has been done in our community along the lines of detection and treatment of the abnormal child in our schools. In fact, in Providence were established the first classes in this country for the defective children. And it would be difficult, in fact well nigh impossible, to measure what a tremendous economic saving to this State has been effected by the diagnosis and treatment of the mentally defective child in the schools. Here it is, of course, that the cases can be observed in their incipency where special training can be instituted, where certain cases can be cured, others much improved, and certain others segregated, thus preventing these individuals becoming later neurotics and psychotics, delinquents and criminals. If a careful system of follow-up work can be instituted and carried out in connection with our present excellent school supervision, many of those cases, which are improved, could be followed and guided after they leave the school and their lives so adjusted that they might, at least, attain a partial degree of economic efficiency instead of drifting, like a ship without a rudder, into wrong companionship, improper industrial pursuits and vicious habits of health.

The mental hygiene of industry is today a problem which is very prominent in the minds of both the employer and the employees. When one consults the turn-over sheet of many a large industry, it is readily seen that the cause of the tremendous labor turn-over at the present time, while partly due to the social unrest, is also in a great measure the result of psycho-

logical difficulties, and it seems obvious to anyone with experience in disorders of the mind, that individuals who have been hired and fired a dozen times a year for such causes as are recorded on the turn-over sheet of industry, as, "unwilling to work under supervision", "suspicious of fellow-employee", "unable to concentrate upon work", "exaggerated ideas of importance", all constitute definite psychological difficulties that are problems for the specialist rather than the employment bureau.

A study of the problem of fatigue, of types of work suitable for women and children and many of the other problems relating to modern mental hygiene, would be of the greatest value in increasing the efficiency of the worker and lessening the problems of the employer.

It seems obvious, therefore, that the establishment of mental hygiene centres throughout the community, would offer to the public a place where the problems of the cases of incipient nervous and mental disease could be brought, from which public education regarding the understanding of mental diseases could be disseminated, where policies as to the modern methods of treatment could be worked out and where the needs of our institutions could be brought before the public without the accusation of self-seeking. Here the employer and employee could come seeking a solution of the hiring and firing problem, to such a centre the schools might refer cases presenting unusual problems, or those going out from under their control.

There is much work to be done in our State, and work that if thoroughly done will decrease manyfold the nervous and mental invalids in our midst, will increase the efficiency of our schools, bring about greater production in our industries, and lessen crime and delinquency. All this cannot be done at once, but we have made a beginning, and we must count upon the whole medical profession to see to it that the dawn of a new era of mental and nervous health is brought to every corner of our State.

EDUCATION AND RECREATION IN THE ARMY.*

By MAJOR GENERAL WILLIAM G. HAAN.

Assistant Chief of Staff, and in charge of education and recreation work in the Army.

That education and recreation as applied to the new Army has passed the experimental stage and is now a vital factor in the training of the soldier was shown at a convention of Army educational officers, held at Camp Zachary Taylor, near Louisville, Kentucky, on December 9, 10 and 11.

Early in the year, the War Department, actuated by a deep sense of responsibility, felt towards the millions of men brought into the service during the war, as well as by the astounding facts as to illiteracy and physical condition of the young men of the country as shown by draft statistics, and the excellent work done by the Commission on Education and Special Training, had conceived an army built up on a new plan. It was proposed to make the army not only a military force to be trained and ready in time of national emergency, but a great educational institution where young men of the best mental, moral and physical conditions, and with the highest ideals of patriotic citizenship would be produced.

This plan was realized, in a measure, when the Congress appropriated the sum of \$2,000,000 to be devoted to this purpose during the fiscal year 1920. Accordingly, in September of this year instructions went forward to the commanding generals of all divisional camps and of territorial departments, who at once appointed on their staffs, officers known as Education and Recreation Officers to assume direct charge of the work. Each officer has associated with him at least one civilian expert in educational affairs, who furnishes assistance and advice in establishing schools and manual training classes.

But it remained for the Camp Taylor Convention, called by the Secretary of War in order that the work in general might be coordinated and rough places smoothed out, to show that the army is now in reality a great

*Authorized by the Office of the Assistant to the Secretary of War; Service and Information Branch.

training school where the mothers of our young Americans will be glad to see their boys go. This idea of the army as a vast university in khaki is admittedly hard to conceive, but nevertheless the thing has been accomplished right before our eyes.

No longer is the army merely concerned with the making of a recruit into an efficient fighting man, by giving him the prescribed system of military training only for a few hours of the day and leaving him almost entirely to his own resources for the remainder of the day. It now assumes responsibility for the entire twenty-four hours of his day, and sees that every portion is gainfully spent in useful study or helpful recreation. In the soldier's life, education and recreation now have equal places with military training, and are definitely scheduled in the program of daily work.

All training, whether purely military or educational, has as its main object the development of the soldier's mind to make him a responsible thinking human being. Every soldier, however poorly he may be educated, or however limited his experience, has still a thinking mind, and that mind is active practically all the time. Such a man is perhaps incapable at the moment of looking at affairs in a broad sense, but the object of all training must be to guide that mind in the direction of right thinking. In order to accomplish this the instructor himself must be able to estimate about what are the channels of thought in the mind of the men being trained, in order that he may so conduct his own part of the work as to gain the confidence of the men he is instructing or leading.

In developing the soldier's mind the most rapid progress is made by placing upon the man, as early as practicable, as much responsibility as he can stand. This placing of responsibility on the man stimulates his pride, raises his self-respect, and urges him to better effort. This is applicable in all kinds of training. It is character building, frequently called moral training, and the most effective means of stimulating self-development.

Every soldier, down to and including the last recruit, will sooner or later become a leader in a smaller or greater sense. In battle, as battles are now necessarily conducted, direct responsibility very frequently goes out of the hands of

the officers, and small groups of men must accomplish objectives by themselves; hence leadership must be assumed by some or all of these men. Any one of them may be placed in a position where he must act independently and make his own decision on his own responsibility, which requires thinking and acting on his own judgment. It requires leadership. And it is to develop these latent qualities of leadership that this educational programme has been inaugurated.

New recruits are inclined to look on their officers from the very beginning with respect and as thoroughly conversant with their duties. It is very important that this natural impression should be maintained and improved, but this cannot be done unless the leaders are in the habit of thinking correctly and justly in all matters, and acting accordingly. This is necessary to gain and maintain the confidence and respect of the men. When it has been fully accomplished, then most of the small difficulties disappear. There will be a high state of morale in the command, and wherever we find a high state of morale we always find a high state of discipline, instruction and consequent usefulness.

Officers of our future armies will be required not only to be thoroughly trained in a professional sense but must also have that human quality which comes only through a real interest felt for the welfare of the men under their command. They must not only be military instructors to the men, but also their leaders in all sports and recreation. Experience of the larger colleges and universities has shown that a certain amount of sport and recreation is a necessary part of the student's life, and as the army is now a great university in every sense of the word, and each man composing it a student, recreational activity will be a part of its training. Here the army chaplain enters as an important factor in the handling by military means alone of all the camp activities formerly furnished by the Y. M. C. A., Knights of Columbus, etc., and the Americanization of aliens in the army.

Under the system of education now in force it is possible for men to receive instruction so as to fit them to be carpenters, blacksmiths, pharmacists, dental assistants, engine workers, mechanics, draftsmen, stenographers, truck

gardeners, motor drivers, repair men, telegraphers, radio and telephone operators, etc. Such educational subjects as English, geography, mathematics, United States history and modern languages are also taught. Of course, at the present stage of the game it is not possible to give instruction in all subjects at any one camp or post, but so far as practicable, the desires of the enlisted man as to the courses to be taken by him will be met.

A certificate will be given by the local commanding officer or school officer to each man who successfully completes a course, indicating that he has satisfactorily completed the course studied. A standard War Department certificate will later be adopted, and the possession of such a certificate by a soldier who has been discharged with a character of "Excellent" will be sufficient recommendation to a civilian employer as to the qualifications of the discharged soldier for employment.

On the other hand, it is highly important that the men themselves take the thing seriously and realize that the Government is concerned not only in making trained soldiers of them, but also making of them self-supporting and self-respecting members of the communities to which they will return on discharge.

This work is unique in the history of the Government, and highly important in showing the trend of the army in facing the new problems developed by the World War. It will result in making the army in time of peace a more valuable factor in the life of the Nation by producing men of best possible type, having a good general education, possessing a useful trade, but, above all, thoroughly trained in moral character and the duties and responsibilities of good citizenship.

AMERICAN PROCTOLOGIC SOCIETY.

Twenty-first Annual Meeting.—Memphis, Tenn.,
April 22 and 23, 1920.

PROGRAM.

Annual presidential address, "Co-operation and Co-ordination." Collier F. Martin, Philadelphia, Pa.

1. "Post-operative Treatment of Fistula, with Special Reference to the use of Gutta-Percha

Tissue." Alfred J. Zobel, San Francisco, Cal.

2. "Some Aids in the Record Keeping of Ano-rectal Cases." Ralph W. Jackson, Fall River, Mass.

3. "Standardization of Hemorrhoid Operations." Louis J. Hirschman, Detroit, Mich.

4. "Personal Experience in the Treatment of Internal Hemorrhoids." Alois B. Graham, Indianapolis, Ind.

5. "A Virulent Infection of the Colon by the Colon Bacillus." Jerome M. Lynch, New York, N. Y.

6. "Pleuro-colonic Fistula." Frank C. Yeomans, New York, N. Y.

7. "Reflexes Due to Rectal Diseases." William M. Beach, Pittsburgh, Pa.

8. "Pre-operative Treatment in Rectal Surgery." William H. Stauffer, St. Louis, Mo.

9. "Local Pain and Other Symptoms Associated with Infections of the Anal Tissues." Granville S. Hanes, Louisville, Ky.

10. "The Recto-vaginal Septum in Proctology." Descum C. McKenney, Buffalo, N. Y.

11. "Disabilities Due to Intestinal and Rectal Diseases in the Young Soldier." William H. Axtell, Washington, D. C.

GOVERNMENT NEEDS PHYSICIANS.

The United States Civil Service Commission announces that a large number of physicians are needed for employment in the Indian Service, the Public Health Service, the Coast and Geodetic Survey, and the Panama Canal Service. Both men and women will be admitted to examinations, but appointing officers have legal right to specify the sex desired when requesting the certification of eligibles.

Entrance salaries as high as \$200 a month are offered, with prospect of promotion in some branches to \$250, \$300, and higher rates for special positions.

Further information and application blanks may be obtained from the secretary of the U. S. Civil Service board at Boston, New York, Philadelphia, Atlanta, Cincinnati, Chicago, St. Paul, St. Louis, New Orleans, Seattle or San Francisco, or from the U. S. Civil Service Commission at Washington, D. C.

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J. F. ARCHAMBAULT	<i>Secretary</i>	Arctic

NEWPORT

Meets the third Thursday in each month

A. F. SQUIRE	<i>President</i>	Newport
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R. I. Ophthalmological and Otological Society—2d Thursday—October, December, February, April and Annual at call of President
Dr. Frank J. McCabe, President; Dr. C. J. Astle, Secretary-Treasurer.

PAWTUCKET

Meets the third Thursday in each month excepting July and August

E. J. MATHEWSON	<i>President</i>	Pawtucket
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PROVIDENCE

Meets the first Monday in each month excepting July, August and September

DENNETT L. RICHARDSON	<i>President</i>	Providence
RAYMOND G. BUGBEE	<i>Secretary</i>	Providence

WASHINGTON

Meets the second Thursday in January, April, July and October

JOHN CHAMPLIN	<i>President</i>	Westerly
W. A. HILLARD	<i>Secretary</i>	Westerly

WOONSOCKET

Meets the second Thursday in each month excepting July and August

EDWARD L. MYERS	<i>President</i>	Woonsocket
THOMAS F. BAXTER	<i>Secretary</i>	Slatersville

EDITORIALS

POST-GRADUATE WORK IN LOCAL HOSPITALS.

In a number of states there have been established through the efforts of the American Medical Association, post-graduate courses of instruction for the profession at large, conducted by the staffs of established hospitals in the respective states. Such a movement has made little or no headway here in Rhode Island for very obvious reasons, chief among them being the

fact that none of our hospitals are teaching hospitals or connected with medical schools. However, it now seems probable that some plan suitable to our needs and applicable to our hospital resources will be offered the physician of the state, in the near future. A committee of the Rhode Island Medical Society, working in conjunction with the American Medical Association, has formulated plans whereby the clinical material—medical as well as surgical—of the hospitals may be placed at the disposal of the whole medical profession for study and mutual advantage.

Naturally, the success of any plan along this line is predicated on two features—the willingness of the staffs of the hospitals to hold clinics at definite times, and the attendance of physicians not officially connected with the hospitals at such demonstrations. Of the two, the latter is unquestionably the more essential to the success of the plan, for the operations, the medical ward visits and the laboratory technique will be going on regardless of outside attention.

It is, therefore, essential that the profession show its interest in this project by attending the clinics frequently and as regularly as possible. The advantages accruing to the visitor is evident, and no less to the staff member who is put upon his mettle to provide a good clinic, have his material well in hand and to be "up" on his subject.

A CHILDREN'S HOSPITAL.

It has been recognized for many years by physicians and surgeons whose hospital affiliations permit them to treat children in our institutions, that there is a need in this state for a hospital devoted exclusively to children. Many of the diseases peculiar to childhood are better treated in a special hospital of this character. The spirit underlying the general hospital, while perfectly proper as far as the treatment of adults is concerned, is not best suited for dealing with the special problems of childhood. This is amply borne out by the experience in other states where special hospitals for children have been established.

It has remained for the laity to recognize the urgent need of such an institution. One of our local hospitals has lately received generous donations from three different benefactors, the income from which is to be devoted exclusively to the use of children. These bequests are to be used mainly to meet special needs, but they serve to show the interest of the general public in the proper care of children who are confined to hospitals.

The will of one of the state's wealthiest citizens, recently filed for probate, provides for the establishment of children's hospitals in this state and in other states of the union, in the event of certain remote contingencies being brought about. These conditions may never be realized, but the interest of the testator in bettering the

conditions of child-life is apparent. Medical men can have great influence in shaping public opinion looking to the ultimate establishment of such an institution.

RECIPROCITY.

An increasing demand is being made for some method by which a physician, after once taking the detailed examination necessary for his license to practise medicine, will not be required to prepare himself for a similar examination, if circumstances arise compelling him to change his residence. The details of the fundamental sciences of medicine, especially of anatomy, physiology, pathology and materia medica, are so many and so difficult to retain, that after a man has left the atmosphere of the medical school for the field of general practise or of his specialty, it is at times impossible for him to study and retain these minute details sufficiently long to transfer them to the examination paper.

Reciprocity would, of course, obviate the necessity of a physician ever being compelled to submit to the drudgery of the preparation for another examination, if reciprocity were national and uniform and if the requirements for licensure were the same in all states. Unfortunately this is not true and for this reason the states that have adopted some definite standard for the licensure have not looked with favor upon reciprocity with states of lower standards. It is manifestly unfair to grant a license to a man who may have a diploma from a medical school which gives him his course in two or three years without requiring any premedical training and to give the same privileges to the man who, as in this state, must graduate from a recognized medical school and must have had, in addition, at least two years of premedical training and at least one year of service in a hospital.

The Federation of State Medical Boards has suggested a method which seems to promise a solution to this difficult problem. This organization is made of representatives from the licensing boards of the various states. At its annual meeting, just held at Chicago, the president advised the adoption of Interstate Endorsement. This means that, if a physician in Colorado wished to secure a license in Rhode Island, he would submit his credentials to the Rhode Island authorities through the proper authorities in his own

state. If these credentials show that he has fulfilled the requirements as to preparation and education in Rhode Island, then he would be endorsed by the Rhode Island authorities and a license would be issued to him without examination. This method might be called individual reciprocity. It would soon tend to elevate the standard in those few states that now encourage and foster the institutions of low rank and make a uniform standard for the whole country. Just so long as there are states that tolerate the lower standards, there will be states which will refuse to recognize general reciprocity. Therefore the method suggested seems to offer hope for the solution of a problem that works hardship on the physicians who may, from force of circumstances, be required to move from their usual fields of practise.

THE USE OF THE WORD INFLUENZA.

A recent issue of the Illinois State Health Bulletin bears on its front page a picture, which shows a bowl plainly marked Influenza. The fumes arise from the bowl into three clouds marked Pneumonia, Tuberculosis and Death. Around the side of the bowl are labels so arranged as to camouflage the name influenza, and bearing the titles Coryza, Bad Cold, Bronchitis, La Grippe, etc. The cartoon bears the caption "A rose by any other name would smell as sweet."

It is time indeed that the public should come to learn that most so-called colds, grippe and acute coughs, are in reality mild cases of influenza and as such may be a source of infection.

Many laymen have made an arbitrary division of the acute naso-respiratory infections, in order of severity, as follows, cold, grippe, influenza and "flu." The feeling seems to be that the ordinary cold may be entirely disregarded, grippe may call for home medication or at most a counter prescription, while "flu" should be regarded in such a way that the whole household and perhaps the immediate neighborhood will soon be in a state of hysteria. Of course the slang term "flu" should be entirely discarded by both the physician and the public. The term influenza might well be used freely to diagnose all the acute epidemic naso-respiratory

infections, especially when accompanied by fever. This teaching would tend to give the public more respect for the milder types of influenza and would undoubtedly tend to decrease the sequelae, which while less fatal than in the pandemic of 1918 are certainly more frequent as regards incapacity for a long time. Whether it will be shown that we dealt with a new disease entity in 1918, or that the true causative agent of influenza is not yet known, the conservative point for the layman to realize is, that all so-called colds, grippe, etc., with fever, are in fact attacks of influenza varying in intensity, and that influenza is not to be considered lightly, or disguised by other names, on account of the varied types of its sequelae.

ENDOW THE MEDICAL LIBRARY.

Every member of the Rhode Island Medical Society whose will contains provisions for public bequests, should not fail to remember the Library. In many instances the holders of bonds have been generous in surrendering them to meet the constantly increasing expenses of the institution. We should, however, make provision for the future. Those of our number who have prospered should esteem it a privilege to remember the Society in their wills, and needless to say, small contributions are as gratefully received as large ones. It should be a matter of pride that the Library, which has contributed so largely to the success of the profession in this state, be not allowed to suffer for want of funds in the years to come.

ENTER THE GENERAL PRACTITIONER.

The first sentence on the first page of a recent book by one of the greatest living contributors to medical advance, Sir James MacKenzie, reads as follows: "The progress of medicine will be hampered and delayed until the general practitioner becomes an investigator". With the development of specialization in the various branches of our art, on all sides has been heard the question "What is to become of the general practitioner, the old fashioned family physician?" And among the cognoscenti the feeling has been growing that the picturesque old fellow has outlived

his usefulness and is fast becoming but a sort of general adviser or social worker among his patients, leading them tactfully from the office of one specialist to another to be intricately and elaborately diagnosed and treated. But now comes our eminent British colleague saying, "Friend, go up higher"; indeed, he summons the family doctor to the place of honor in the front rank of the workers against disease.

Dr. MacKenzie's main contentions are these. First that to the general practitioner alone comes the opportunity of studying the early stages of disease, the time when the patient presents symptoms rather than physical signs and the only time when accurate diagnosis and treatment can prevent the occurrence of dangerous illness. Second, that the general practitioner, more than any other, can follow the development of disease through all its stages during a period, it may be, of ten, twenty or even thirty years, and can by careful observation and records fill in many of the gaps in our knowledge. The experience gained by long and accurate study of this sort means a high degree of skill in determining prognosis, a matter of the greatest importance to the patient. In his recent article on the "Future of Medicine" in the "Oxford Loose-Leaf Medicine", Dr. MacKenzie reiterates these views and states his belief that not in the laboratory nor in the hospital ward, but in the domain of private practice and in the out-patient clinic, lies the hope of the most rapid medical advance.

The lesson to the family doctor is plain. Armed with a good preliminary training in the scientific branches and a clear conception of the work of the specialists, he must cultivate accuracy in observing symptoms, studying and recording each case with conscientious care, and from time to time correlating his observations and conservatively attempting to draw conclusions. Then he must follow his cases, recording every evidence of progress of the disease and the apparent affect of therapeutic measures. In this way his records will eventually become not only of interest to himself but when he has studied them, critically correlated and analyzed them, and published the results, of definite value to the world at large.

SOCIETY MEETINGS

RHODE ISLAND MEDICAL SOCIETY.

Quarterly Meeting, March 4, 1920.

The regular quarterly meeting was held March 4, 1920, at the Medical Library. In the absence of the President in the Orient, the meeting was called to order by the First Vice-President, Dr. Jesse E. Mowry.

The minutes of the December meeting were read by the Secretary.

The presiding officer referred to the death of Dr. Frank B. Fuller, a former president of this society.

Program: Paper, "Posterior Positions of the Occiput and their Management," by Dr. H. G. Partridge in absentia. The paper was read by the Secretary. Discussion opened by Dr. Carver, who stated that in his experience, contrary to textbook statements, a large percentage of these cases do not rotate spontaneously and that manual rotation is more certain and permanent than instrumental rotation. A palpable anterior fontanelle usually means a malposition.

Dr. Appleton: Deformed pelvis is a frequent cause of posterior positions. Prophylaxis consists of early inducement of labor where pelvic measurements show deformity of the pelvis, such as the justo-minor pelvis.

Paper, "Analysis of 100 Deaths from Diphtheria," Dr. D. L. Richardson, Superintendent Providence City Hospital. Discussion by Drs. Lovewell and W. R. White. Collation followed. Adjournment.

J. W. LEECH, M. D., *Secretary*.

PROVIDENCE MEDICAL ASSOCIATION.

February 2, 1920.

The regular monthly meeting of the Providence Medical Association was called to order in the Medical Library by President Dennett L. Richardson at 9 P. M. on February 2, 1920.

The records of the previous meeting were read and approved.

The applications of Drs. Paul Cook, Hilary Connor and Parker Mills having been approved by the Standing Committee, a motion was passed instructing the Secretary to cast one ballot for their election.

The President announced the appointment of Committees as follows:

Collation Committee: Dr. Herbert L. Harris and Dr. Nat H. Gifford.

Publicity Committee: Dr. Roland Hammond, Dr. M. B. Milan and Dr. William O. Rice.

The paper of the evening entitled "Clinical Neuro-Pathology and Its Value to the Practitioner" illustrated with lantern slides was read by Dr. Frederic J. Farnell.

Dr. Farnell's paper presented Neuro-pathology from the functional and experimental points of view. Accepting the importance of organic pathology in the past, he showed that the future progress in Neuro-pathology depended upon work along these lines of function and experimentation, points of view which relate to individual physiology and psychology.

He luminated many nervous manifestations in endocrin disorders and spoke of endocrin symptoms in nervous disorders. He emphasized synthesis in contrast to analysis and built up from the point of view of endocrinology physical types and explained their function as individuals. He showed many lantern slides illustrating their physical types and showed how much knowledge could be learned from a Neuro-pathological study of these so-called "misfits". Throughout his paper he emphasized the importance of the individual as a functional unit, not pathology en masse.

The discussion was opened by Dr. Charles A. McDonald and closed by Dr. Farnell.

Dr. Richardson appealed to the members for more reports of cases and presentations of specimens.

Dr. Richardson announced a Committee to draw up a memorial on the death of Dr. Frank B. Fuller at an early date.

Meeting adjourned at 10:10 P. M. after a short rhyme by Dr. William R. White.

Attendance twenty-eight members and two guests.

RAYMOND G. BUGBEE, M. D., *Secretary*.

MEMORIAL TO DR. FRANK B. FULLER.*

Mitchell, Hersey, Fuller, names to remind us that our brothers, honorable beloved physicians of their generation, are one by one passing on,

and that we are conscious of a loss with the going of each, loss to our profession, our association, our comradeship, our community.

Dr. Frank Boutelle Fuller was one of our best men, and our sorrow when the unexpected tidings of his decease came to us was deep and universal, for all who knew him held him in highest regard.

He was born in Wilton, Maine, August 28th, 1853, graduated at Bates College, 1875, and the Harvard Medical School 1879. Was interne in Dr. Richardson's Lying-In-Hospital in Boston, and later in the Rhode Island Hospital. Began practice in Pawtucket in 1881 and continued there until his death from heart disease, on January 23, 1920. He was secretary of this Association for one year, in 1884-5, and its president for one year in 1893-4.

How briefly told is this outline of Dr. Fuller's life and how truly we who knew him read between the lines, of a life full, rich, splendid. While it was not for him to gain the popular distinction of the great soldier, the statesman, the jurist, the preacher, it is our belief that no higher, grander service exists than that rendered by a faithful, kind physician to his fellow men.

Dr. Fuller was a citizen of the highest type, loyal to his native State, his city, his country, and the volume and quality of his public services can not be told in words. His patriotism during the late war led him many times to work beyond his strength.

Let us recall that it was Dr. Fuller who solicited and collected our contributions of instruments and supplies to aid the impoverished physicians of Belgium.

Again, it is safe to say he possessed the best attributes of a real physician. He was kind, honorable, intelligent, faithful. He was progressive and in touch with modern advances in medical practice, and yet was conservative and thoughtful in estimating and accepting unproven innovations in the treatment of disease. True it is he was greatly beloved by a very numerous clientele. He was a Mason, a Republican, an Episcopalian, but best of all he deserves the title of good physician.

Of Dr. Fuller, the man and friend, it is indeed a pleasure to speak. Most equable his temperament and manner; always genial and

* Read before the Providence Medical Association, March 1, 1920.

cheery; kind and cordial, a companion to be sought and cherished.

Many of us have enjoyed his delightful hospitality, and recall his pride and pleasure when he first welcomed us to the home of his own building.

Of his life within that home it is ours to speak with guarded thought but we rejoice that he was rich in the joy and blessings incident to a most happy family life.

Recently his daughter wrote these words to the writer of this memorial, "Father was always an inspiration to us". Happy indeed and thrice blessed is the man at three score years and seven of whom his children think and speak like that, and happy the son or daughter who has the example and association of such a father.

As for us let us review his life's record, profit by his unobtrusive but uplifting influence, and while we miss the familiar form now resting amidst the silence and beauty of Swan Point near the bank of the Seekonk, let us cherish his memory, think of him as a friend to be trusted once and always, rejoice that his life was so useful and happy, that two generations of children knew his tender love, that no crushing sorrow left its shadow on his life, that his last hours were painless, and that, in our certain belief, all is well with him now and ever more, for

Who more deserves eternal rest
Than he who does on earth his best;
Men's lives who brightens and uplifts,
Transmitter he of Heaven's gifts.

WILLIAM R. WHITE, M. D.

CHARLES H. FRENCH, M. D.

Committee.

BOOK REVIEW.

THE HEALTH OFFICER. By Frank Overton, M. D., D. P. H., Sanitary Supervisor, N. Y. State Department of Health and Willard J. Denno, M. D., D. P. H., Medical Director of the Standard Oil Company. Octave of 512 pages with 51 illustrations. Philadelphia and London: W. B. Saunders Company, 1919 Cloth, \$4.50 net.

During the last few years there have been published several very excellent manuals for

health officers. This is the latest and one of the best. The authors have had an extensive experience in local and State work in New York under Dr. Biggs. The field of public health has broadened enormously since the time when the health officer was thought of chiefly as a chaser of bad smells. The authors are up to date and have an excellent perspective of the different phases of health work. Naturally most of the book is taken up with the contagious diseases, but sufficient attention is given to sewage, water, household wastes and nuisances to enable the local health officer to understand them. The advice about nuisances and household wastes is very sensible and practical. The modern view point is illustrated by the fact that there are chapters on Venereal Disease Control, Vermin, Mental Defects, Food Values, Industrial Hygiene and Camp Sanitation. The chapter on Ventilation embodies the results of the latest researches which have demonstrated that bad air is bad because of its physical properties, stagnation heat and humidity, and not because of chemical poisons. The chapter on immunity is easy to understand which cannot be said of much that is written on that subject. Every health officer should have this book.

C. V. C.

LETTERS

TO THE EDITOR—

The *Los Angeles Times* in a recent editorial said, "Fifty years ago many land owners sold valuable farms in New England to buy cheap acreage in California. This year their children are selling lands in California to buy cheap farms in New England. Just a natural ebb and flow of land tides or as Tennyson expresses it 'that which drew from out the vasty deep turns again home.'"

But this is not all the truth. California is full of men passed middle life, farmers from the West, who have acquired what seems to them a competence and seek to end their days in a more equable climate, men from the East retired from active business, seeking greater creature comforts and less responsibility, superannuated teachers and professional men lured by tales of competence from its fertile soil, and the majority look forward to owning

an orange grove, a nut ranch or chicken farm from which they can pluck a comfortable living while resting peaceably in the sunshine.

Sooner or later they purchase a farm or ranch and begin operations and later they nearly all experience the same result.

Ranching except on a large scale and with unlimited capital is but a repetition of earlier struggles to gain a livelihood, exactly that which they were hoping to avoid.

If new land is opened, there is the question of irrigation, the discomforts of heat, of sandstorms, isolation from neighbors and lack of the conveniences to which they have been accustomed. There is the possible failure of crops, the increasing costs of fertilizers and the unceasing fight against pests and plant diseases, and when after years of as hard work as they ever did in their life, they have a crop to sell, an added source of trouble arises in satisfactory merchandising of their products.

So there must be added to the statement in the *Times* the proviso that they are going back to the East if they can find a purchaser for their California properties.

The daily press of this State contain page after page of advertisements of five and ten acre farms for sale. The same is true of Florida, and the really successful crop of each State is the tourist.

Los Angeles in the last census claims 250,000 tourists and admits that during the year there have been stolen in that city 780 automobiles, in value a million and a half dollars, a close second to the robberies perpetrated on the tourist population.

This question of irrigation is most important and unfortunately not yet thoroughly understood. The water rights are inherent to the soil and although purchased by the prospective farmer as shares, they cannot be sold independently of the land, and with as yet an imperfect system there is frequent clashing of interests and oftentimes an unsatisfied demand for water.

An unprecedented dry spell affects an entire area and the need of water is felt by all, but those who are foreranded in their requisition get so many acre inches on a specified day while others are sure to suffer with consequent detriment to their crops.

The water is supplied for 24 continuous hours

and every field is tilled and graded so that the water will cover so much acreage of surface or by means of gates at some depth. There are varying ideas regarding both the amount of water and the frequency of irrigation and the chances are the tenderfoot farmer is on the wrong side of both factors.

One form of investment is to buy unimproved land at from one to two hundred dollars an acre and rent it to ambitious farmers who have not the necessary capital to buy outright. Such lands in favored localities rent for \$45 an acre and will soon pay for themselves and in five or six years when the tenant has become discouraged and left for the East, you will have a valuable property to sell to the newcomer, for there is a sucker born every minute. I am credibly informed that scores of successful real estate brokers have adopted this plan to their very great advantage.

Catalina is one of the best advertised features of California and at this time of the year one of the most disappointing.

The island, 27 miles from the mainland, is practically owned by Wrigley of chewing gum fame, and aside from the charms of mountains and sea has one of the best hotels in the State, but for me give me Block Island every time.

On paper there is excellent fishing but the fish don't bite and the vaunted sea gardens are incomparable with those of Bermuda or Nassau. Three days of quiet on the island sufficed to relieve the tinnitus acquired in noisy Los Angeles, and in turn Coronado, Santa Barbara, Del Monte were visited with a few days stay in each. To my mind Santa Barbara is the queen of California resorts, although I recollect with fond memories one drive in San Diego which took us some miles into old Mexico at Tia Juana, where a Scotch highball assuaged somewhat the unpleasant experience with the roulette wheel. Tia Juana is wide open and what that means in Mexico is perhaps known to some of your readers. San Francisco like all California cities, is crowded with tourists and travellers for the Orient. Hotel accommodations are almost impossible. The city is teeming with business and more than any others, reminds us of the good old East.

Tomorrow we sail for Yokohama on the Tenyo Maru. We have not yet learned the

Japanese language, as there are some 18,000 words in common use, but we have already learned three. Hope to get a dozen more while en route as we sail in a Japanese ship.

F. T. R.

January 28, 1920.

TO THE EDITOR:

S. S. Tenyo Maru, February 3, 1920.

To-day has been a novel one, a week without a Monday. Yesterday was Sunday, February 1st, and to-day Tuesday, February 3rd. We crossed the 180° meridian at 9:12 this morning, and of course dropped a day from the calendar. If you remember your physical geography you will know the reason.

We have gotten so accustomed to ship-board life that it would seem strange to go on shore. Have now been on board twelve days and have six more before we reach Yokohoma. The days pass very quickly. Four of us congenial to whist, have a sitting at bridge every day at 11 o'clock, and tomorrow sixteen of us start a tournament which lasts three days. To-day started the week of games. They play base ball on the upper deck with netting all around, when there are deck sports. Japanese wrestling, sports for the children, dancing and moving pictures, and last night a baby was born on board. They took up a collection and netted the child \$80.00. We have breakfast at 8:30, lunch at 1:00 and dinner at 7:00, and at 6:45 we all meet in the lounge and have a cocktail, so our time is pretty well occupied and it passes very quickly. A number have been sick. Although we have met no storms the sea has been pretty rough, and yesterday and to-day we are ploughing over enormous rollers into which the ship plunges so as to bury her nose in green water, and for a ship of this size—20,000 tons, it is going some.

We had a nice day at Honolulu. Went first for an auto ride to the Pali, a precipice 2000 feet high overlooking the valley and sea, then to lunch at the Moana Hotel, where we had planned to stay a week before the change in sailing dates interfered with our plans, then for another ride to the Punch Bowl, an extinct volcano and then a stroll about the city shopping and then back to

the ship for dinner. We sailed at 9:30 at night and were at noon to-day about 3500 miles from San Francisco. Truly the Pacific is some ocean, for we have about 2000 miles now to go. If anything of interest happens before we reach port I will add to this letter and finish it at Yokohoma, after we have been on Japanese soil. It is difficult to write, the ship is pitching so and the writing room is pretty well forward where its motion is felt more.

February 6th. At noon to-day we were 1170 miles from Yokohoma and this has been a strenuous week. They organized a committee for deck sports, and unknown to me, I was made chairman of the Finance Committee and asked to take charge of two Bridge Tournaments, one for men and one mixed and I surely had my troubles trying to explain its methods of play and how to score, but finally I managed to pull it off, and then began the real pull. We are 230 saloon passengers and I organized a trio of girls as solicitors and one Jap, and canvassed the boat pretty thoroughly. The Jap got \$184 and the girls \$250. A percentage of this goes to the Jap, Seamen's Fund and part to the crew, musicians, motion picture operators, and deck stewards and the balance is put into prizes. We allotted \$40 to the children of the steerage. There are 164 of them between two and twelve years of age, and no more than a dozen have been on deck in two weeks. The seas have been running so high that everything has been battened down. It is some place, I tell you, to go down there and see them packed like sardines in a box, yet they are clean and there is very little sickness.

We had a very interesting exhibition of Japanese wrestling Wednesday night at 8:30. The deck space was prettily decorated with flags, with a ring in the centre of the deck covered by matting and on it a circle of sand bags making an enclosed space about fifteen feet in diameter. The object is either to throw your opponent or push him out of the ring. First there came a fellow dressed in Japanese costume with a queer pagoda hat tacked on his head by a series of strings, in his hand a sort of paddle. He stood solemnly at the side of the ring and about thirty Japanese

sailors and stewards came in and squatted around the outside of the ring. Then a curiously dressed fellow with funny hair and face came hopping in and hollered a lot of stuff and bowed himself out. Then they called the contestants by two, with a lot of ceremony and jumping about, stamping their feet. They squatted on their haunches and glared at each other for a few minutes, then one would shout and slowly rise and walk to the side of the ring and take a drink of water and a little salt which he would throw on the ground, and slowly go back to his squatting position. Sometimes they did this three or four times and then suddenly with a yell they sprang at each other and the bout was on. Sometimes it was a draw but usually one or the other was thrown quickly, sometimes clear over his head, and sometimes clear into the crowd watching. After twelve bouts, each one announced in this peculiar way, they had a procession and one fellow jumped into the ring uttering weird cries and challenged the crowd of thirty. One of these entered and began a tussle. The loser was thrown out and new comers tackled the victor till he was thrown, and then this one took the place and challenged the others. It was rare good sport and kept every one interested for an hour and a half.

Last night we had a Leap Year Ball and in the dining room a Japanese theatre. You should see it. One fellow dressed up in a curious fashion. He took all the parts and acts throughout, with the necessary explanations, while one girl picks a Japanese banjo and continually utters weird cries. He was irresistibly funny with his outlandish gestures, and shrill cries, blowing water out of his mouth and bumping his head on a table, but the Japs never cracked a smile.

Wednesday was one of their feast days to celebrate the end of winter and we were invited to the dining room at 9:30 p. m. We sat at little tables and they served us a punch lemonade and cake, and great bowls of dried beans. As soon as a little speech had been made and responded to by one of the Americans they drank a cup of tea in which there was supposed to be placed one bean for each year of your life, to ward off

illness, and lost spirits, and then each one began to throw beans about to drive out the devils. They were used about as confetti is used at home and every one got well peppered.

There is one missionary on board whom everybody hates. He has four children, two pairs of twins, and they are not allowed to play or have any amusement but sit solemnly beside their father and watch him eat oranges, apples and bananas. He never gives them a thing but if they are good he allows them to throw the banana skin overboard. We have offered them candy and things to play with but they are not allowed to have any pleasure. While the beans were flying it was suggested we shell the parson, and a score of us with hands full of beans walked by him and I tell you he got a dose. I put my whole strength into the beans by the handful and every one hit his face. We practically threw him out of the room and to-day one of the ladies told him he was a damned sneak to treat his children that way.

February 8. To-night we had a Sayonara Dinner (good bye dinner) with an extra bill of fare and a concert afterwards with distribution of prizes for the deck sports which have been going on for a week. A young lady who is something of an elocutionist recited, some others sang, and there were two short speeches, one by a Jap and one by one of the passengers. All in all it was a very enjoyable time. The missionary I spoke about has been driven to the lower deck. He has moved his chairs there with his family and everybody is relieved. More money has come in and we have now an extra \$115 for the steerage children. It has been so stormy and rough that the steerage passengers have not been on deck. I did not realize that there were over 700 on board and 140 young children till I made a trip through the ship to-day and found them packed like sardines in a box.

February 9. To-day we had a lottery for the children. I put 120 white beans, ten red ones and five black ones in a box, and with all the passengers watching, we had the whole bunch of children file out of one side and across the C deck and each one drew a

bean from the box. The first three black drew \$10 each, and the next seven \$5 and the red ones \$1 and all white ones fifty cents, so they all got something and every body was pleased. At lunch to-day we sighted land after seventeen days of trackless ocean during which we sighted two other ships. I never before realized the vastness of the Pacific. We docked at 8 o'clock at night. The dock was covered with coolies waving Japanese lanterns and shouting like mad. We did not go ashore but watched the disembarkation of the Yokohama passengers and the 700 steerage. It is very cold. The streets are full of snow and after the hot weather we had at Honolulu it is very trying.

February 10. To-day we had our first experience in a really foreign land. At 9 o'clock we went ashore and took our first ride in a jinriksha drawn by Japanese coolies who take you about very comfortably at a uniform dog trot. We rode about the city for a couple of hours and then had lunch at the Grand Hotel and at 1:30 took the electric for Tokyo, where we attended a reception and tea given the passengers by the President of the Steamship Company, Mr. Ansana. He is a multi-millionaire and has a wonderful place in Tokyo. It is built on a side hill and by a series of stairs you reach wonderful rooms with beautiful decorations and a big collection of curios. The house is wonderful and more so that it is built entirely without nails, every piece of wood being dovetailed. After we had seen the place, we were invited to a big reception, more of a ceremonial tea served in Japanese style by his daughter and granddaughters. They were very pretty and wonderfully dressed and served us tea in bowls with elaborate bows. It was a curious concoction, and looked like the scum you see on stagnant ponds. We tasted it but that was all. Then we went to the drawing room where they served tea and cakes and a punch made of Bacardi rum, and curious jelly wrapped in palm leaves. Cigars and cigarettes were served and then a Jap juggler gave a very good exhibition of slight of hand, and a native orchestra gave us some Japanese music. One played a sort of flute made of bamboo, another strummed on a long nickel

banjo with a little wooden shovel, and a third played a sort of zither about six feet long. They all squatted on the floor in a very uncomfortable manner and made horrible music, at least to our ears. They are very ceremonious and bowed to the floor to every guest. Then we took the electric train back to Yokohama and went on board ship which really seems like home to us now. There is a good deal of flu here and you see them everywhere with nose respirators on, bundled in heavy capes but with bare legs and wooden shoes. During muddy weather they wear wooden shoes with two projecting pieces of wood so that they go hopping about with a terrific clatter and little short hopping steps, very funny to see and more so to hear. Nobody of our party wants to live in Japan. The United States for me every time. Tomorrow we go again to Tokyo to see the capitol and take a ride about the city which is nearly forty miles across and has over two million inhabitants.

As to-morrow is a native holiday, the birthday of an ancient Emperor, everything is closed, but Thursday we plan to stroll about the shops. Friday we sail for Kobe and Nagasaki, 1100 miles south, where we hope to find warmer weather.

We see by the papers that New England has had another blizzard and congratulate ourselves on not being there but we have suffered from the cold here.

F. T. R.

MISCELLANEOUS

THE LIBRARY TABLE.

THE HISTORY OF ST. BARTHOLOMEW'S HOSPITAL. By Norman Moore, M. D. London. C. Arthur Pearson Limited. 1918. Vols. I, II.

With these beautiful and imposing volumes Sir Norman Moore has crowned a life-time of work devoted to the study of the history of medicine. For thirty years he labored collecting the materials for his story of St. Bartholomew's Hospital in London, and as one reads his fascinating pages one cannot fail to participate in the reverence and admiration of the author for this ancient institution. Eight-hundred years are a very long time and yet through all these centuries St. Bartholomew's

has ministered to the poor, the sick, and the infirm, whether strangers or residents in the city of London. A king's jester in his early days, making himself liked by his witticisms and flattering talk, a man of lowly birth, Rahere decided to amend his life and to devote himself to the service of God. He determined to go to Rome, hoping by so laborious a journey to obtain complete forgiveness of his sins. He started at once and reached Rome. There he went to the places of martyrdom of the blessed apostles Peter and Paul, bewailing his sins and resolving to sin no more. He fell ill, and thought his last hour was drawing nigh. He burst into tears and vowed a vow that if he should be allowed to return to his own country he would there build a hospital for the recovery of the poor and would serve the poor gathered there, as far as he could, in all their needs.

One night on his way home he had a vision. A four-footed winged beast carried him to a high place whence he saw a deep pit into which he feared he might be cast and was terrified. A stately figure appeared to him and spoke good and consolatory words and cheered him. "Oh man", said the figure, "what would you do for him who in such danger helped you?" Rahere answered that he would do all he could. Then said the figure, "I am Bartholomew, the apostle of Jesus Christ, who am come to help thee in difficulties and to show thee the hidden things of heavenly mystery. Know that by will and command of the Trinity on high, I have chosen a place in the suburb of London, at Smithfield, where in my name thou shalt found a church and it shall be there a house of God, a tabernacle of the Lamb, a temple of the Holy Ghost. Know that of this work you shall be the servant and I the lord; do you do the part of servant and I will discharge the duty of lord and patron." With these words the vision disappeared.

And so it came to pass that on arriving home Rahere with the help and encouragement of the Bishop of London and of Henry I, the Norman King of the English, began to build the church of cut stone and immediately began also to build the hospital house at some little distance from the church. The hospital prospered. Kings, Bishops, Barons, men of high degree and of no degree bestowed upon it gifts of

money and land so that its revenues increasing, its opportunities for service were thereby enhanced until that royal robber Henry VIII. attempted to ruin it. But the people of London would not have it so and the King was constrained to return the hospital to the care and government of the City of London, under the patronage of which it continues to the present day.

In addition to the history of the hospital proper, Sir Norman Moore has written of those famous men who have worked within its walls, helping to make the medical history of London and of the world. Of the Elizabethan physicians, of William Harvey and his successors, of John Abernethy and the other surgeons there are interesting accounts. The reproductions of old charters with their quaint mediaeval writing and seals are simply beautiful. The work is dedicated by the author to St. Bartholomew's Hospital and we can think of no more worthy or acceptable gift than these monumental volumes from an illustrious son to the venerable mother who nurtured him.

SIR VICTOR HORSLEY. *A Study of His Life and Work.* By Stephen Paget. London. Constable and Co. 1919. Pp. 358.

To those who mourn the too early death of Sir Victor Horsley, and they are legion, there is at least one consolation—that he has Mr. Stephen Paget for his biographer. It is no easy task to write the life of a man of science, for such men by reason of their calling tread the quieter paths of the world, making no great noise. And while it would be not quite accurate to call Sir Victor Horsley a quiet man, yet we think few will deny that his assured claim to remembrance will rest upon his contributions to the healing art rather than upon his political and other activities.

To have determined by experiment the relation of the thyroid gland to the pathology of myxoedema and cretinism and to the general nutrition of the body; to have been instrumental in the prevention of rabies in England; to have advanced our knowledge of the localization of function in the brain; to have been the first who ever removed a tumor from the spinal cord and that successfully; to have been a pioneer in the operative treatment of trigeminal

neuralgia and of brain tumors—these surely are enough to confer scientific immortality. But they represent only a fraction of Horsley's work, for seemingly there were no limits to his interests and no end to his endurance. He fought against the use of alcohol, he fought for democracy in politics, and he fought what he regarded as the vested interests in medicine, always willing as Mr. Paget says, "to set aside his own interests for the whole-hearted, full-blooded pursuit of an unpopular cause". Like Charles Kingsley, whom in many ways he resembled, he succumbed to the thing he least feared. Kingsley wrote a panegyric in praise of the "brave North-Easter", and it killed him. Horsley was sure that a non-user of alcohol could undertake risks which other men could not; he exposed himself to the burning sun of Mesopotamia with the result that he lies buried in Amarah. The span of Horsley's life covers the period of modern neurology. When he came upon the scene the less surgeons saw of the brain the better were they pleased; when he left it, and largely through his labors, neurological surgery had attained to a position of eminence. Those who enjoyed Mr. Paget's *Life of another great surgeon, Ambroise Pare*, will be under a further tribute of gratitude for this biography of Sir Victor Horsley.

THE PHYSIOLOGY OF MUSCULAR EXERCISE. By F. A. Bainbridge, M. A., M. D., F. R. S. London. Longmans, Green and Co. 1919. Pp. 215.

This monograph of some 200 pages is a really illuminating account of the physiology of muscular exercise. It is an excellent example of that kind of physiology, now happily coming into vogue, which Dr. J. S. Haldane calls "new", although like so many other "new" things it is, in principle, very old. Its inspiration is Greek, that is to say, it views the organism as a unit, and considers the relatedness of one process to another in physiological activities. Professor Bainbridge does not shut the muscles up in insulated compartments and does not treat them as though they enjoyed a sort of splendid isolation. He links them up in his book as they are in reality, with the respiration, the circulation, and the metabolism of the body. A glance at his chapter-headings

gives evidence of this. He discusses the Sources of Muscular Energy; the Respiratory Changes during Exercise; the Output of the Heart during Exercise; the Blood-supply to the Active Organs during Exercise; the Arterial Pressure; the Passage of Oxygen into the Tissues; the Co-ordination of the Changes Occurring during Exercise; Training; Exercise at High Altitudes; the After-effects of Exercise; Effort Syndrome and Over-stress of the Heart.

Perhaps the most interesting of these interesting discussions is that upon the co-ordination of the changes occurring during exercise. Having described the adjustments taking place in the circulatory and respiratory systems during exercise, he goes on to say that if the exercise is to be efficiently carried out, something more than the mere existence of these adjustments is required. Some mechanism must exist whereby the activities of the muscles, the nervous system, the heart and the lungs are co-ordinated and linked together in such a way that the resources of the body are utilized to the best advantage and the body acts as a physiological unit. Then follows an account of these co-ordinating mechanisms that is replete with valuable information.

With respect of over-stress of the heart, the author does not believe that the heart possesses diastolic tone and hence the heart being unable to lose what it never possessed, loss of diastolic tone is not the cause of dilatation of the heart. The fatigued heart dilates not because its muscular wall yields more easily before the inflowing blood during diastole, but because its contractile power is weakened and only by dilatation can its contractile power be increased in accordance with "the law of the heart". The atonic heart dilates in order to develop more energy, since dilatation increases instead of lessening the power of the heart to carry on the circulation. Such are some of the results of recent physiological research as set forth in this valuable monograph which we commend to our readers.

J. E. D.

MEDICAL VETERANS OF THE WORLD WAR.

An Association of Medical Veterans of the World War was organized at Atlantic City, in June, 1919, at the time of the meeting of the

American Medical Association, and a constitution and by-laws adopted. About 2800 physicians have already joined and all others who are eligible are invited to join the society.

The constitution states that "The dominant purpose of this association shall be patriotic service. The objects of this association shall be: To prepare and preserve historical data concerning the medical history of the war; to cement the bonds of friendship formed in the service; to perpetuate the memory of our medical comrades who made the supreme sacrifice in this war; to provide opportunity for social intercourse and mutual improvement among its members; to do all in our power to make effective in civil life the medical lessons of the war, both for the betterment of the public health and in order that preparedness of the medical profession for possible war may be assured."

The organization of the society provides for state and local organizations wherever the members desire it, and in some states, such as Wisconsin, organization has already been effected.

It is desired by the national association that those who are already members meet together in larger or smaller groups, at the first convenient opportunity, and effect a local organization with a chairman and secretary, and also at the next meeting of the state medical society that a place be provided on the program for the Medical Veterans.

The organization of the society is based on democratic principles and it is hoped that the members who have already joined will take the initiative and organize their own state and local societies.

The national organization will assist by furnishing application blanks and copies of the constitution and by-laws, and, if desired, stationery.

The first thing to be done after organization of a state society is effected is to elect a councillor to the general council of the organization, to represent the state society at the next annual meeting of the veterans at New Orleans on the first day of the meeting of the American Medical Association, April 26, 1920.

A badge or button for members of the society is being made and will soon be ready for distribution. F. F. RUSSELL, M. C., U. S. A., Secretary, Army Medical School, Washington, D. C.

FROM A CHILD'S TOY.

Just one hundred years ago Rene Theophile Hyacinthe Laennec, one of the pioneers of modern medicine, observing some children playing in the gardens of the Louvre, listening to the transmission of sounds along pieces of wood, conceived the idea of utilizing this method for listening to breath sounds in examining a patient's lungs. He went home, fashioned a tube by rolling up some glued paper and then experimented with this in his ward at the Necker hospital. From this incident in the garden dates the modern "stethoscope," an instrument well nigh indispensable in the modern practice of medicine.

The early stethoscopes contrived by Laennec, were unlike those generally in use in this country at the present time, for they were constructed to be used by one ear only. Nevertheless the original Laennec type is still widely used in European countries. To us, who are accustomed to the scrupulous cleanliness of everything about the modern hospital, it is curious indeed, to learn that the filthy condition of the patients in the hospitals in Laennec's time made it repugnant to physicians to listen to the sounds in the lungs by placing the ear directly on the chest of the patient.

Laennec gave his invention the name by which the device is still known, deriving the word stethoscope from two Greek roots, one meaning the "chest" and the other "to observe" or "regard."

In using the stethoscope the instrument should be placed on the bare chest wall. For this reason a satisfactory examination of the lungs can only be made when the patient is stripped to the waist. Careless physicians sometimes attempt to examine a patient's chest through the clothing. Such an examination is worthless. If you want reliable information concerning the condition of your lungs, do not go to a doctor who attempts such careless work. It is time and money wasted.

Dr. Laennec was born at Quimper in Brittany, on February 17, 1781, growing to manhood during some of the most troublous years in the history of France. He studied medicine at Paris, receiving his degree of doctor in 1804. He died on August 13, 1826, at the early age of 45, in the quaint old town in Brittany, in which he first saw the light.